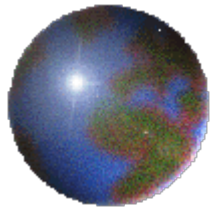


45th Annual Conference
of the Agricultural Economics Association of South Africa
26-28 September 2007 - Johannesburg

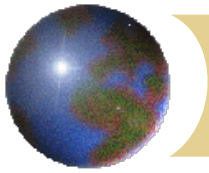


Structural Change in Agriculture: Confronting the Transition Issue

Bruno Losch (Cirad /World Bank)

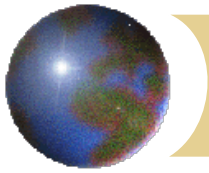
Thierry Giordano (FMFA/DBSA)

This presentation relies on the first results of a World Bank program launched in 2005, entitled “Structural implications of trade liberalisation on rural development”.
We greatly thank the French Cooperation and the International Fund for Agricultural Development for supporting this programme.



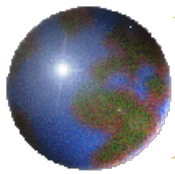
Main Thrusts

- ⊕ Could the classical evolutionary model of national economies (agricultural and industrial revolutions) still be replicated in LDCs?
- ⊕ Economic transition: very slow in LDCs over the last 50 years => LDCs do not manage to take off
- ⊕ Hurdles to further acceleration:
 - ⊞ *still-to-happen demographic transition,*
 - ⊞ *restructuring of world markets,*
 - ⊞ *tremendous gaps of competitiveness in agriculture between developing and developed countries*
- ⊕ National government: Rethink agricultural and more broadly public policies to speed up economic transition
- ⊕ International community: Coordinate trade, aid, migration policies



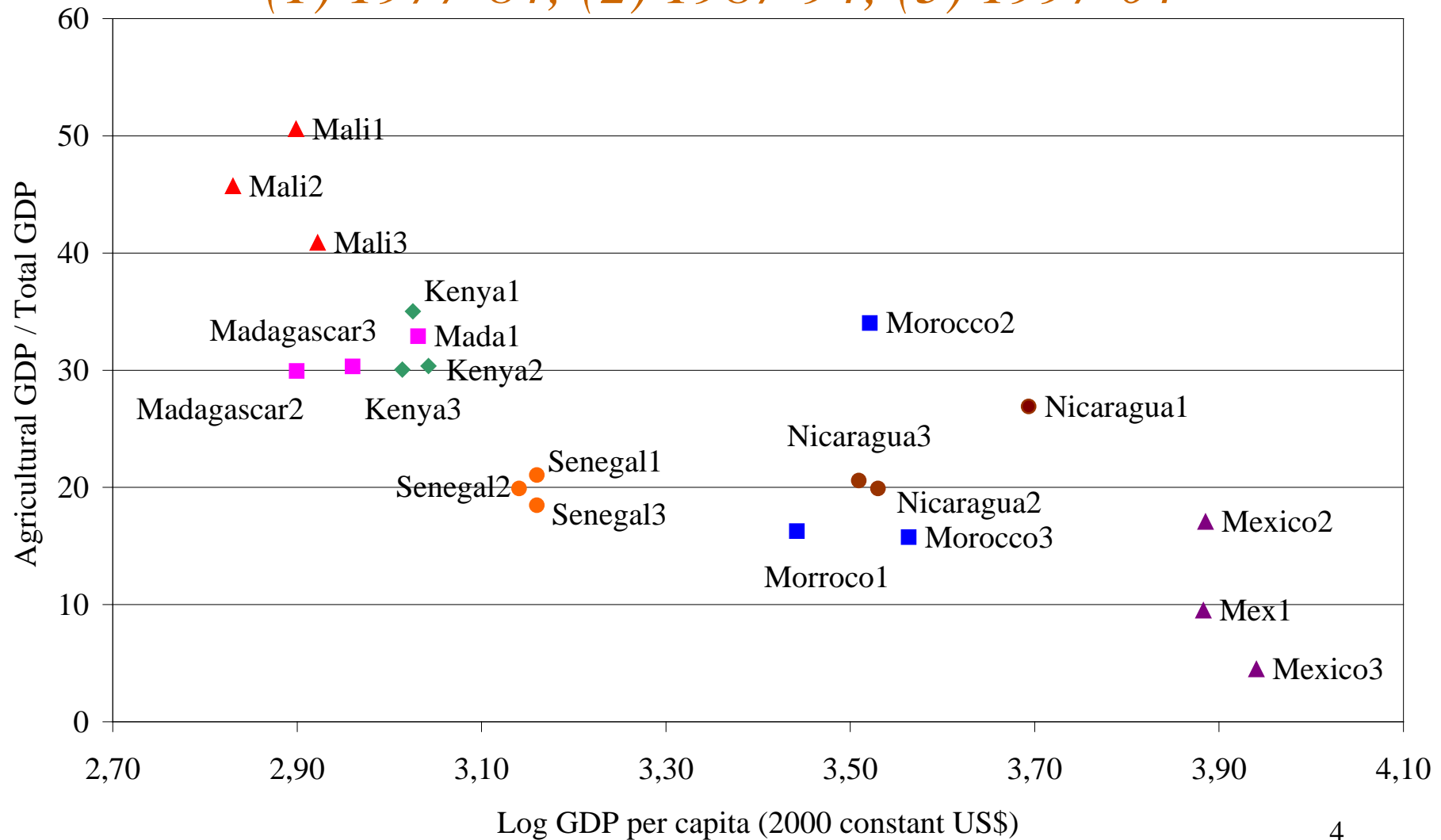
Economic Transition

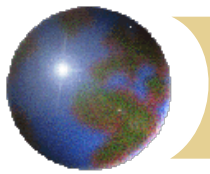
- ⊕ Classical model: the productivity of family farms increases and resources (capital and/or labour) are released and transferred to industry and services
- ⊕ How has LDCs started to engage in the economic transition process?
- ⊕ Transfer of resources:
 - ⊠ *Labour = distribution of employment amongst the various economic sectors*
 - ⊠ *Capital = weight of agriculture in the domestic economy*
 - ⊠ *=> understand whether resource transfers have operated, are operating or will operate*
- ⊕ Seven countries: Mexico, Nicaragua, Morocco, Mali, Senegal, Kenya, Madagascar



Agricultural EAP and GDP per capita

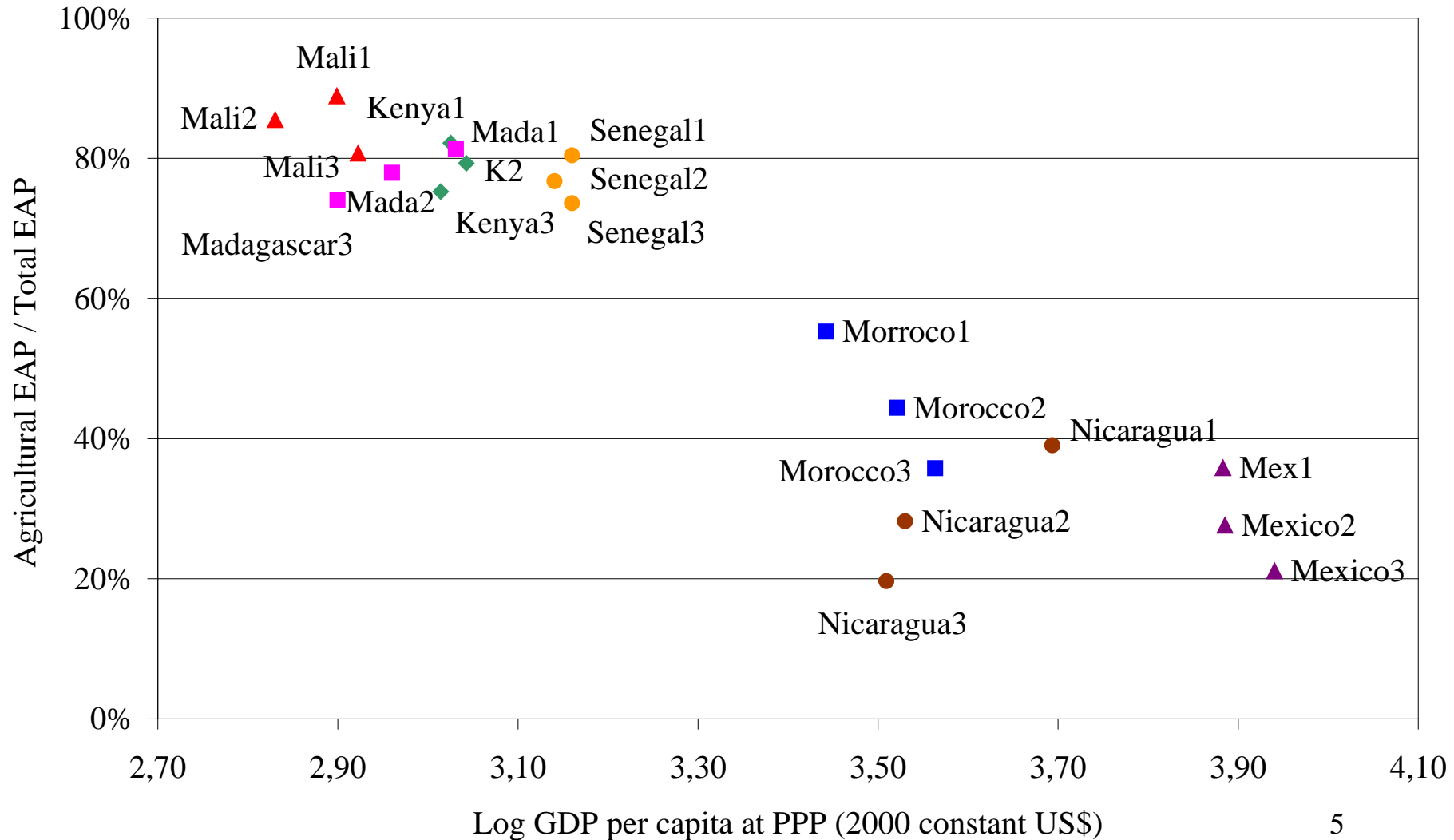
(1) 1977-84; (2) 1987-94; (3) 1997-04

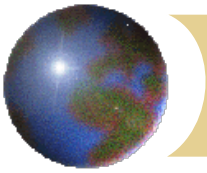




Agricultural EAP and GDP per capita

(1) 1977-84; (2) 1987-94; (3) 1997-04

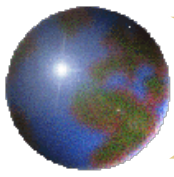




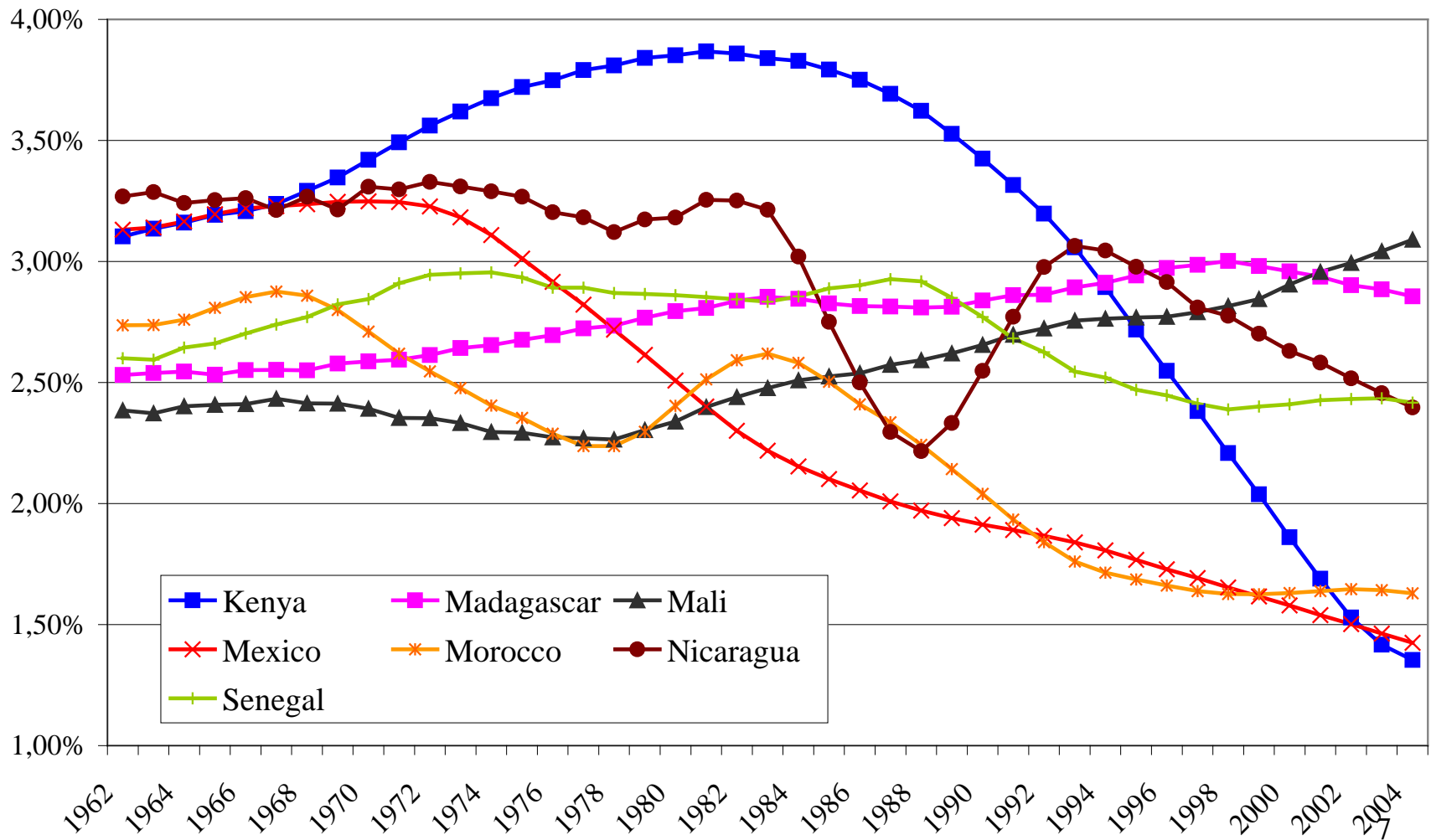
Demographic transition

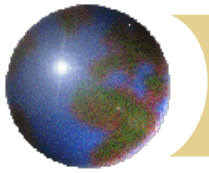
✚ Population growth rate:

- ✚ *Mexico and Morocco: slowing down since the 70s' => below 2 %*
- ✚ *In stark contrast, Mali : still increasing => ~3 %.*
- ✚ *Senegal and Madagascar: declining since the end of the 80s' and 90s' => between 2.4 and 2.8 %*
- ✚ *SSA: growth rates => the higher in the world*



Population growth rate (1962-2004)





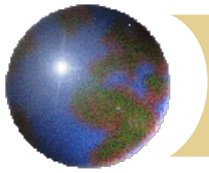
Demographic transition

✚ Population growth rate

- ✚ *Mexico and Morocco: slowing down since the 70s' => below 2 %*
- ✚ *In stark contrast, Mali : still increasing => ~3 %.*
- ✚ *Senegal and Madagascar: declining since the end of the 80s' and 90s' => between 2.4 and 2.8 %*
- ✚ *SSA: growth rates => the higher in the world*

✚ Consequences

- ✚ *Future GDP growth rate has to exceed the population growth rate
=> require greater efforts*
- ✚ *The stronger the population growth rate, the higher the number of young people entering annually the labour market, and the larger the share of the working youth in the total population => more employments*



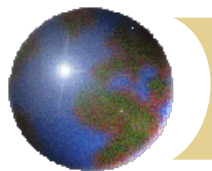
Low employment opportunities

✚ Supply side: Current level of formal jobs

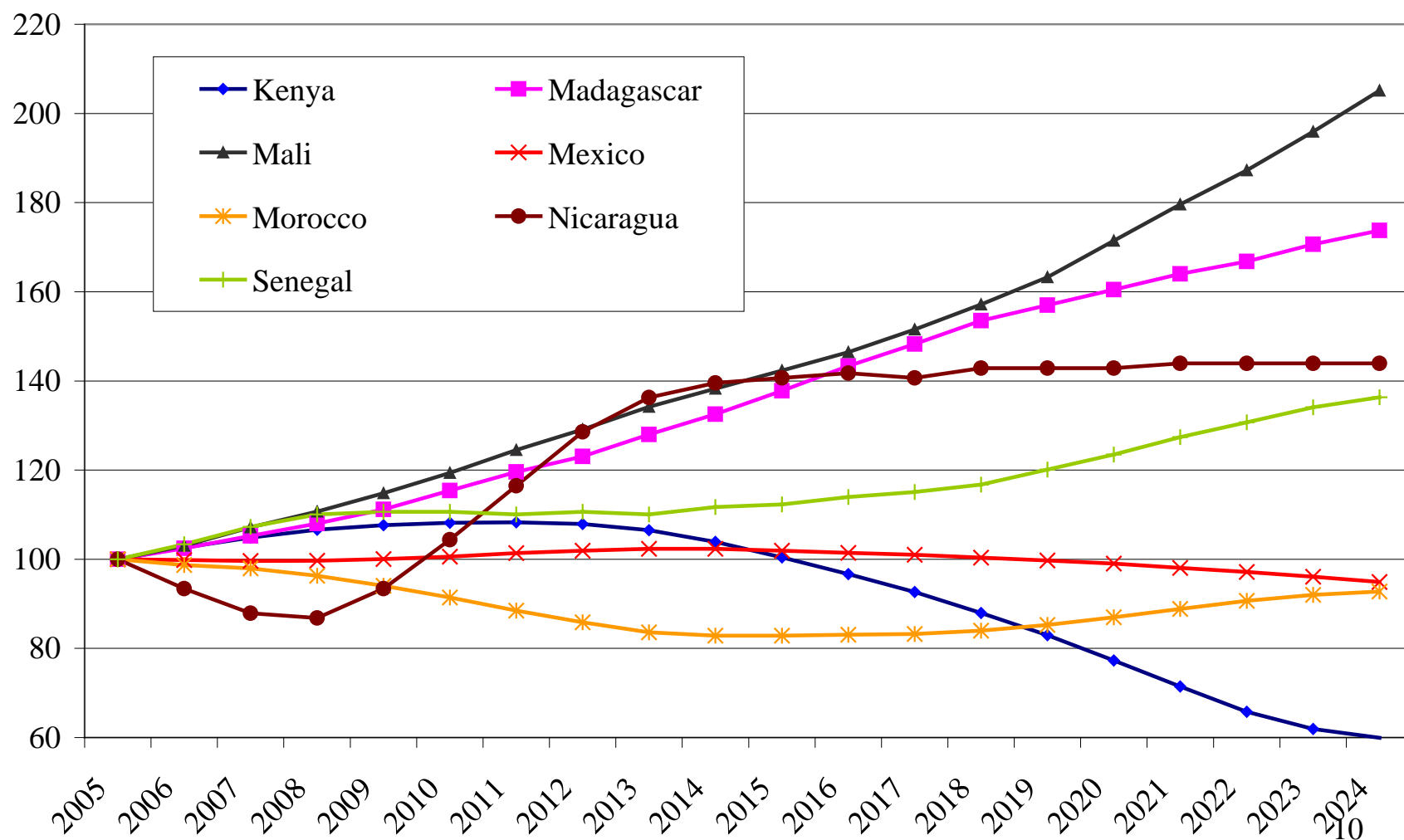
- ✚ *Mali: 32,000 formal jobs in 1995; 39,500 in 1999 ⇔ cohort = 100,000*
- ✚ *Madagascar: 42,000 formal jobs (tourism + textile-garment) ⇔ 11 % of the 387,000*
- ✚ *Senegal: since 2000, less than 30,000 jobs have been created annually ⇔ cohort = 100 000*
- ✚ *Nicaragua, 32,000 jobs each year ⇔ cohorts: 90,000 annually*
- ✚ *Morocco: 217,000 jobs between 1994 and 2003 ⇔ 460,000 annual new comers*

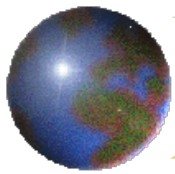
✚ Demand side:

- ✚ *The situation is going to worsen because of the still to happen demographic transition*

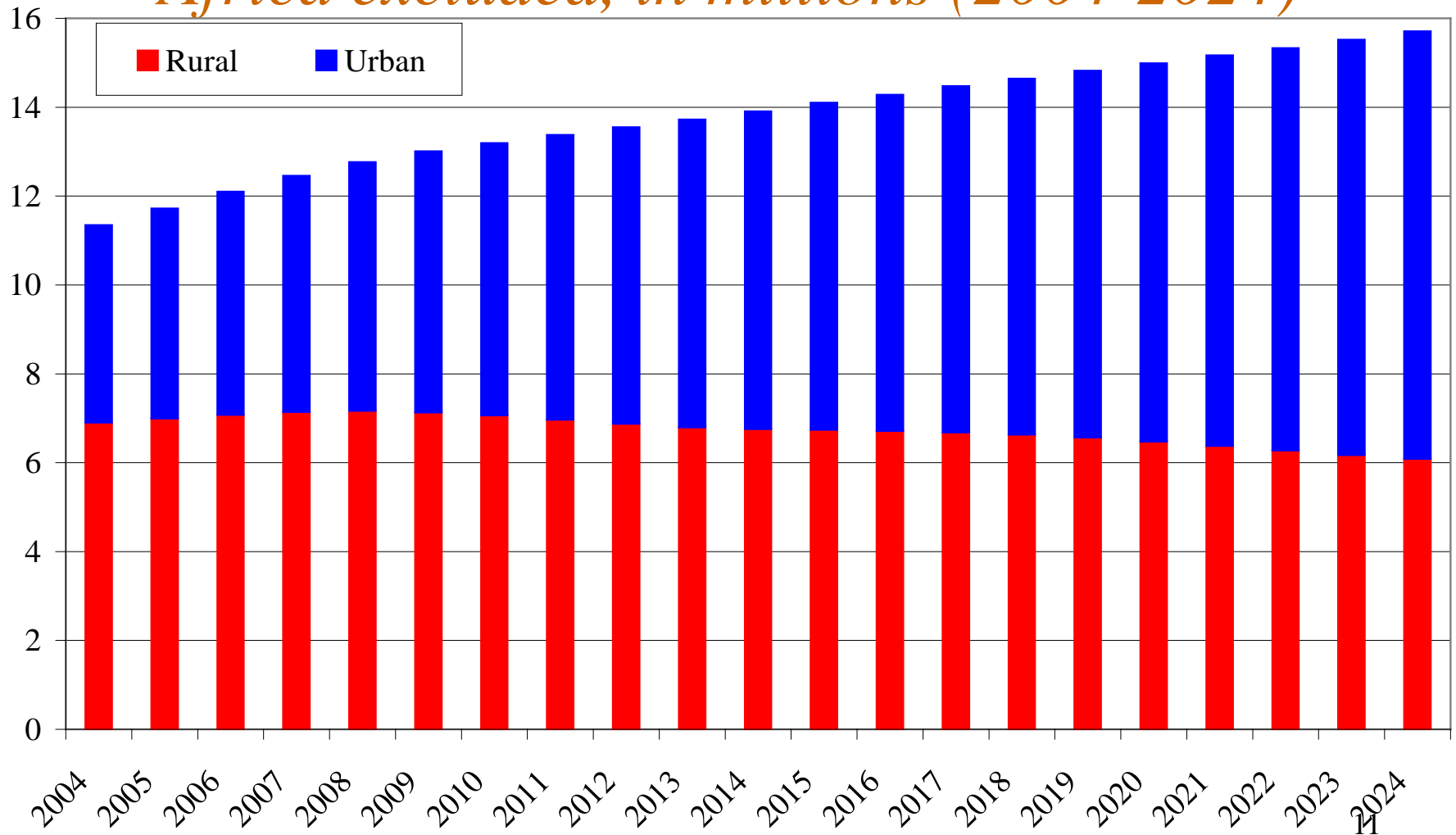


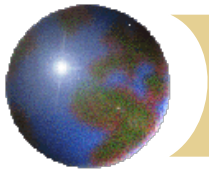
Estimated annual youth cohorts (2005-2024, base 100 = 2005).





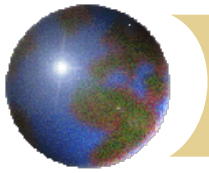
Yearly cohorts in sub-Saharan Africa, South Africa excluded, in millions (2004-2024)





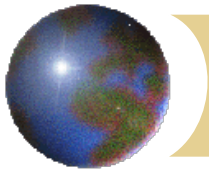
Informal employments dominate

- ✚ Due to the lack of alternatives in formal sectors, workers mainly rely on informal employment.
 - ✚ *Mali: the informal sector is the main source of employment, gathering 80 % of total jobs*
 - ✚ *Madagascar: in 2004, salaried jobs were rather an exception to the rule: only 13 % of the workers are salaried. This figure was slightly lower in rural areas, 12%*
 - ✚ *Senegal: in 2005, informal employments made up 28 % and 64 % of total employment respectively in urban and rural areas, and this trend is strengthening since 92 % of the new jobs were created by the informal sector*
- ✚ Most of the informal employments emphasize self-financed, under-capitalized, small-scale, unskilled-labour intensive production leading to low revenue, bad work conditions and low productivity = Poor living conditions, slow economic transition



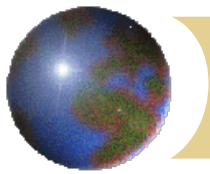
Absorption capacity of agriculture: Sustainable?

- ✚ Consequences of the large absorption capacity of agriculture over the last 40 years:
 - ✚ *Extension of the agricultural frontier => marginal land colonization => land degradation*
 - ✚ *Downsizing of farms => the growth of the agricultural population has outpaced the growth of the agricultural land*
 - In Senegal, the number of farms has raised by 48 %, from 295,000 to 437,037, between 1960 and 1998. The average surface per agricultural worker has dropped from 1 ha in 1960 to 0.57 in 1998
 - In Madagascar, between 1985 and 2005, nearly 970,000 new farms were created => the share of employed people working in the agricultural sector has dramatically increased between 1993 and 2004, from 65 % to 82 % => farm size dropped from 1.2 ha in 1985 to merely 0.86 ha in 2005
 - ✚ *Impoverishment of the rural population*



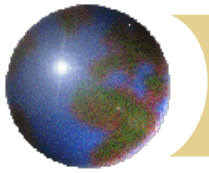
The structural evolution of markets

- ⊕ vertical integration of commodity chains and “horizontal” integration through the new distribution systems (supermarkets revolution)
- ⊕ demand-driven markets characterized by segmentation processes based on norms and standards => contracts
- ⊕ new rules of the game: opportunities for a few and constraints for the many:
 - ⊠ *the production of green beans in Madagascar merely gathers 10 000 contracted producers over a total of 2.4 million farms (0.4 %).*
 - ⊠ *In Kenya, horticultural production is sold mainly on local markets, the supermarket share representing only 4.4 %. Furthermore the development of supermarkets in developed countries lead to exports decline in the early 1990s due to the stringent quality standards which were set up for world horticultural exports.*



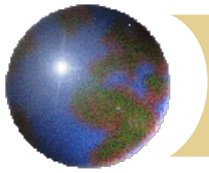
Productivity and competitiveness gaps

EAP (Million)	% Ag. EAP	Green revolution	Type of haulage	Ha / Ag. EAP	Production (Tons)	Productivity
30	2	Yes	Mecanichally drawn	100	10	1000
423	33	Yes	Hauled by animals	5	10	50
423	33	Yes	manual	1	10	10
423	33	No	manual	1	1	1
1300	100					



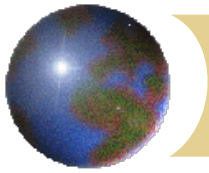
Households adaptation strategies

- ⊕ These evolutions question the ability of farmers to carry on living on their own-farm activities
- ⊕ What are the adaptation strategies developed by farmers to remain on their land while:
 - ⊠ *labour productivity is weakening (labour surplus),*
 - ⊠ *land productivity is decreasing (downsizing of farms),*
 - ⊠ *and capital per farmer is dwindling?*
- ⊕ And when:
 - ⊠ *Formal employment opportunities are weak*
 - ⊠ *Informal rural and urban employments does not offer better income*
 - ⊠ *Agricultural absorption capacity is shrinking*
 - ⊠ *Diversification is limited because of market chain integration*



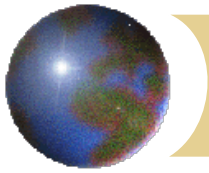
Migration as an exit option

- ✚ Economic transition in Europe at the turn of the century: 40 millions people have emigrated to the new world between 1850 and 1913 (Hatton and Williamson, 1994).
- ✚ Migration has also been an option for some countries engaged in economic transition like Mexico, Morocco and Nicaragua



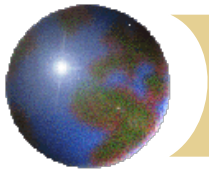
Migrations and remittances

	Migrants (Millions)	Population (Millions)	Migrants / Pop.	Main Destinations	Remittances (Millions \$US)
Morocco	2,7	29,9	9%	Europe	4 724
Mexico	11,5	104,3	11%	US	21 802
Nicaragua	0,7	5,6	12%	Costa Rica; US	600
Senegal	0,5	11,7	4%	Western Africa	511
Mali	1,2	11,4	11%	Western Africa	175
Kenya	0,4	33,4	1%	-	494
Madagascar	0,2	17,0	1%	-	16



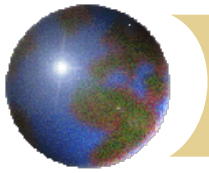
Migration as an exit option?

- ✚ Economic transition in Europe at the turn of the century: 40 million people have emigrated to the new world between 1850 and 1913 (Hatton and Williamson, 1994).
- ✚ Migration has also been an option for some countries engaged in economic transition like Mexico, Morocco and Nicaragua
- ✚ Academic studies emphasize the attraction effects of developed countries (Hatton and Williamson, 2001) and migration as an inevitable step towards the development of country of origin (De Haas, 2006)
- ✚ Such a conclusion should help developed countries to rethink their migration policies and all their foreign aid strategies if they truly want to help economic transition in developing countries to happen (Bakewell, 2007).



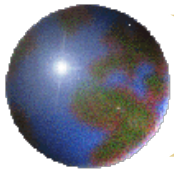
Conclusion

- ✚ Agriculture in SSA:
 - ❖ *Larger share of the EAP (60%)*
 - ❖ *Labour surplus (informal, underemployment) = low productivity of labour*
 - ❖ *Small farm size + low productivity of land*
 - ❖ *Impoverishment = decapitalisation*
 - ❖ *=> huge competitiveness gap*
- ✚ How could these farmers seize opportunities following the restructuring of markets that requires:
 - ❖ *Technical assistance (norms and standards)*
 - ❖ *Investments*
 - ❖ *Capital*
 - ❖ *Inputs (technical package)*
 - ❖ *=> only a small fringe of farmers is involved, the large majority is excluded*
- ✚ Still to happen demographic transition threatens the capacity of the agricultural sector to abide by absorbing a notable share of the young people entering the labour market
- ✚ Since classic economic transition is based on agricultural development => economic transition impasses?



Conclusion

- ✚ Mainly depends on policies that could support households adaptation strategies
=> requires a better understanding of these strategies
 - ❖ *Production diversification => to help farmers to connect to the markets*
 - Public goods provision (agricultural research, infrastructures...)
 - Support missing and imperfect markets (financial services...)
 - Transfers
 - ❖ *Non-farm activities => help workers to connect to the market*
 - Develop opportunities outside agriculture (supply side)
 - Strengthen the skills of the workforce (demand side)
 - ❖ *Migrations*
 - Reduction of the labour surplus
 - Remittances / Private transfers
- ✚ Capacities of SSA countries are weak: Economic transition is not a sectorial challenge neither a domestic stake => requires global development strategies and international policy coordination
 - ❖ *Economic transition could probably not be engaged without a concomitant development of other economic sector absorbing agricultural workforce surplus*
 - ❖ *How to define this new domestic and global policy spaces in today's globalized world?*
 - ❖ *A new economic transition path not relying on agriculture?*



Thank you for your attention

*Contact:
ThierryG@dbsa.org*